

SEQUENCE LISTING

<110> AstraZeneca AB

5 <120> Chemical Compounds

<130> adeokun
ambrose
cresswell
10 dudley

<140>

<141>

15 <160> 12

<170> PatentIn Ver. 2.1

<210> 1

20 <211> 2452

<212> DNA

<213> Homo sapiens

<400> 1

25 gtggacttgt tgcagttgct gtaggattct aaatccaggt gattgtttca aactgagcat 60
caacaacaaa aacattttgta tgatatctat atttcaatca tggacaaaa tcaacatttg 120
aataaaacag cagaggcaca accttcagag aataagaaaa caagatactg caatggattg 180
aagatgttct tggcagctct gtcactcagc tttattgcta agacactagg tgcaattatt 240
atgaaaagtt ccatcattca tatagaacgg agatttgaga tatcctcttc tcttggttgg 300
30 tttattgacg gaagctttga aattggaaat ttgcttgtga ttgtatttgt gagttacttt 360
ggatccaaac tacatagacc aaagttaatt ggaatcgggt gtttcattat gggaattgga 420
ggtgttttga ctgctttgcc acatttcttc atgggatatt acagggtattc taaagaaact 480
aatatcaatt catcagaaaa ttcaacatcg accttatcca ctgttttaat taatcaaatt 540
ttatcactca atagagcatc acctgagata gtgggaaaa gttgttttaa ggaatctggg 600
35 tcatacatgt ggatatatgt gttcatgggt aatatgcttc gtggaatagg ggagactccc 660
atagtaccac tggggctttc ttacattgat gatttcgcta aagaaggaca ttcttctttg 720
tatttaggta tattgaatgc aatagcaatg attggtccaa tcattggctt taccctggga 780
tctctgtttt ctaaaatgta cgtggatatt ggatatgtag atctaagcac tatcaggata 840
actcctactg attctcgatg ggttggagct tgggtggctta atttcocttg gtctggacta 900
40 ttctccatta ttcttccat accattcttt ttcttgcctt aaactccaaa taaaccacaa 960
aaagaaagaa aagcttccact gtcttttgc atgtctggaa caaatgatga aaaggatcaa 1020
acagctaatt tgaccaatca aggaaaaaat attacaaaa atgtgactgg ttttttccag 1080
tcttttaaaa gcatccttac taatccctg tatgttatgt ttgtgctttt gacgttggtta 1140
caagtaagca gctatatggg tgcttttact tatgtcttca aatacgtaga gcaacagta 1200
45 ggtcagcctt catctaaggc taacatctta ttgggagtca taaccatacc tatttttgc 1260
agtggaaatgt ttttaggagg atatatcatt aaaaaattca aactgaacac cgttgggaatt 1320
gccaaattct catgttttac tgctgtgatg tcattgtcct ttacctatt atattttttc 1380
atactctgtg aaaacaaatc agttgcccga ctaaccatga cctatgatgg aaataatcca 1440
gtgacatctc atagagatgt accactttct tattgcaact cagactgcaa ttgtgatgaa 1500
50 agtcaatggg aaccagtctg tggaaacaat ggaataactt acatctcacc ctgtctagca 1560
ggttgcaaat cttcaagtgg caataaaaaag cctatagtgt tttacaactg cagttgtttg 1620
gaagtaactg gtctccagaa cagaaattac tcagcccat tgggtgaatg cccaagagat 1680
gatgcttgta caaggaaatt ttactttttt gttgcaatac aagtcttgaa tttatttttc 1740
tctgcacttg gaggcacctc acatgtcatg ctgattgtta aaattgttca acctgaattg 1800
55 aaatcacttg cactgggttt ccaactcaatg gttatacgag cactaggagg aattctagct 1860
ccaatatatt ttggggctct gattgatata acgtgtataa agtgggtccac caacaactgt 1920
ggcacacgtg ggtcatgtag gacatataat tcacatcat tttcaagggt ctacttgggc 1980
ttgtcttcaa tgttaagagt ctcactcact gttttatata ttatattaat ttatgccatg 2040
aagaaaaaat atcaagagaa ataatcaaat agatcagaaa atggaagtgt catggatgaa 2100
60 gcaaacttag aatccttaaa taaaaataaa cattttgtcc cttctgctgg ggcagatagt 2160
gaaacacatt gttaagggga gaaaaaagc cacttctgct tctgtgtttc caaacagcat 2220
tgcattgatt cagtaagatg ttatttttga ggagttcctg gtccctttcac taagaatttc 2280
cacatctttt atgggtgaag tataataaag cctatgaact tataataaaa caaactgtag 2340
gtagaaaaaa tgagagtact cattgtacat tatagctaca tatttgttgt taaggttaga 2400
65 ctatatgatc catacaaat aaagtgagag acatgggttac tgtgtaataa aa 2452

<210> 2
 <211> 691
 <212> PRT
 <213> Homo sapiens

5

<400> 2
 Met Asp Gln Asn Gln His Leu Asn Lys Thr Ala Glu Ala Gln Pro Ser
 1 5 10 15

10 Glu Asn Lys Lys Thr Arg Tyr Cys Asn Gly Leu Lys Met Phe Leu Ala
 20 25 30

Ala Leu Ser Leu Ser Phe Ile Ala Lys Thr Leu Gly Ala Ile Ile Met
 35 40 45

15

Lys Ser Ser Ile Ile His Ile Glu Arg Arg Phe Glu Ile Ser Ser Ser
 50 55 60

20 Leu Val Gly Phe Ile Asp Gly Ser Phe Glu Ile Gly Asn Leu Leu Val
 65 70 75 80

Ile Val Phe Val Ser Tyr Phe Gly Ser Lys Leu His Arg Pro Lys Leu
 85 90 95

25 Ile Gly Ile Gly Cys Phe Ile Met Gly Ile Gly Gly Val Leu Thr Ala
 100 105 110

Leu Pro His Phe Phe Met Gly Tyr Tyr Arg Tyr Ser Lys Glu Thr Asn
 115 120 125

30

Ile Asn Ser Ser Glu Asn Ser Thr Ser Thr Leu Ser Thr Cys Leu Ile
 130 135 140

35 Asn Gln Ile Leu Ser Leu Asn Arg Ala Ser Pro Glu Ile Val Gly Lys
 145 150 155 160

Gly Cys Leu Lys Glu Ser Gly Ser Tyr Met Trp Ile Tyr Val Phe Met
 165 170 175

40 Gly Asn Met Leu Arg Gly Ile Gly Glu Thr Pro Ile Val Pro Leu Gly
 180 185 190

Leu Ser Tyr Ile Asp Asp Phe Ala Lys Glu Gly His Ser Ser Leu Tyr
 195 200 205

45

Leu Gly Ile Leu Asn Ala Ile Ala Met Ile Gly Pro Ile Ile Gly Phe
 210 215 220

50 Thr Leu Gly Ser Leu Phe Ser Lys Met Tyr Val Asp Ile Gly Tyr Val
 225 230 235 240

Asp Leu Ser Thr Ile Arg Ile Thr Pro Thr Asp Ser Arg Trp Val Gly
 245 250 255

55 Ala Trp Trp Leu Asn Phe Leu Val Ser Gly Leu Phe Ser Ile Ile Ser
 260 265 270

Ser Ile Pro Phe Phe Phe Leu Pro Gln Thr Pro Asn Lys Pro Gln Lys
 275 280 285

60

Glu Arg Lys Ala Ser Leu Ser Leu His Val Leu Glu Thr Asn Asp Glu
 290 295 300

65 Lys Asp Gln Thr Ala Asn Leu Thr Asn Gln Gly Lys Asn Ile Thr Lys
 305 310 315 320

Asn Val Thr Gly Phe Phe Gln Ser Phe Lys Ser Ile Leu Thr Asn Pro
 325 330 335

Leu Tyr Val Met Phe Val Leu Leu Thr Leu Leu Gln Val Ser Ser Tyr
 340 345 350
 5 Ile Gly Ala Phe Thr Tyr Val Phe Lys Tyr Val Glu Gln Gln Tyr Gly
 355 360 365
 Gln Pro Ser Ser Lys Ala Asn Ile Leu Leu Gly Val Ile Thr Ile Pro
 370 375 380
 10 Ile Phe Ala Ser Gly Met Phe Leu Gly Gly Tyr Ile Ile Lys Lys Phe
 385 390 395 400
 Lys Leu Asn Thr Val Gly Ile Ala Lys Phe Ser Cys Phe Thr Ala Val
 405 410 415
 15 Met Ser Leu Ser Phe Tyr Leu Leu Tyr Phe Phe Ile Leu Cys Glu Asn
 420 425 430
 20 Lys Ser Val Ala Gly Leu Thr Met Thr Tyr Asp Gly Asn Asn Pro Val
 435 440 445
 Thr Ser His Arg Asp Val Pro Leu Ser Tyr Cys Asn Ser Asp Cys Asn
 450 455 460
 25 Cys Asp Glu Ser Gln Trp Glu Pro Val Cys Gly Asn Asn Gly Ile Thr
 465 470 475 480
 Tyr Ile Ser Pro Cys Leu Ala Gly Cys Lys Ser Ser Ser Gly Asn Lys
 485 490 495
 30 Lys Pro Ile Val Phe Tyr Asn Cys Ser Cys Leu Glu Val Thr Gly Leu
 500 505 510
 35 Gln Asn Arg Asn Tyr Ser Ala His Leu Gly Glu Cys Pro Arg Asp Asp
 515 520 525
 Ala Cys Thr Arg Lys Phe Tyr Phe Phe Val Ala Ile Gln Val Leu Asn
 530 535 540
 40 Leu Phe Phe Ser Ala Leu Gly Gly Thr Ser His Val Met Leu Ile Val
 545 550 555 560
 Lys Ile Val Gln Pro Glu Leu Lys Ser Leu Ala Leu Gly Phe His Ser
 565 570 575
 Met Val Ile Arg Ala Leu Gly Gly Ile Leu Ala Pro Ile Tyr Phe Gly
 580 585 590
 50 Ala Leu Ile Asp Thr Thr Cys Ile Lys Trp Ser Thr Asn Asn Cys Gly
 595 600 605
 Thr Arg Gly Ser Cys Arg Thr Tyr Asn Ser Thr Ser Phe Ser Arg Val
 610 615 620
 55 Tyr Leu Gly Leu Ser Ser Met Leu Arg Val Ser Ser Leu Val Leu Tyr
 625 630 635 640
 Ile Ile Leu Ile Tyr Ala Met Lys Lys Lys Tyr Gln Glu Lys Asp Ile
 645 650 655
 60 Asn Ala Ser Glu Asn Gly Ser Val Met Asp Glu Ala Asn Leu Glu Ser
 660 665 670
 65 Leu Asn Lys Asn Lys His Phe Val Pro Ser Ala Gly Ala Asp Ser Glu
 675 680 685
 Thr His Cys

690

5 <210> 3
 <211> 1538
 <212> DNA
 <213> Homo sapiens

10 <400> 3
 atgctctttg acctctgaaa atattggaga attttacaac tggcaccttt agctcaggat 60
 tataaagggt gttagttagt ttgtactggt ttatcttcat tgtatataat atatatatta 120
 gtctccaaac atgttgatgt gttttcaatg aaatggatgt ctgaggagaa aaccattagc 180
 ctgagaaaaac ccaaactgta ttcccattgt gaataaaaagg aagtccataa aaatgatgga 240
 aaatgttctg cattctctgt atgatatcaa aatctggcag tacatgaaaa tttttcaaag 300
 15 tgcttattta acaggcataa tctttgggtct cctgagccag aatctgctgg gtatgggact 360
 ggattgctat tttgacaact cgccagtaga ttcttactca gcagagtatt tggaaagcctt 420
 actctaatat tttggccttg ggtctacatt tctcagttct gcacagtcac tcttcccctc 480
 tacactactc tttagtttgt ctcatgattc caatactctc aataattaac caagaataga 540
 actaatcaat cagataactg tggcacagac atcaaataca ttttgctgca accatatcaa 600
 20 caaatgtccc atgaatgata aggggtaacc atattctcat atatgcatcc tcacattacc 660
 acatatatat atgtgcatat gtgtatacag gtaaaaagtgt gtatatatgt atacatgtat 720
 gtttgtgtgt atatacatat atatatcttc acacttttct gaaatatata tatttatgtg 780
 agagaagggt ctgtacttta tttcagaaga gagcttaatg tccaagggtat aattgagagt 840
 ctaaaaatgt tgagttattg aattaattaa acttcatctc tactcaagaa aacttttaac 900
 25 tgagtttaagc tcttctcttc tccacaagtc aagtcaataa aaggaaactg tgatattaat 960
 aattctttcc tgttttgatg taaagaatct atgcataaaa gcagctctaa ttttcatcat 1020
 tcagaaaaat ggtcttgcag ttaattggga ctctcttatt ccagggtgga tctccagtct 1080
 ccatacatat cactgttaga ccatacttat gtaccaagca aagaggggtat attttaattt 1140
 ttaaatgcca atgtaacctg taggcatatt ttttatttgt cttaaattat ttcctatttg 1200
 30 gaagttttaa atacctgga taattttatt tactcatatt tttaaagaaa aaaatcttat 1260
 gccaccaact taattgaata aacaagtaaa agccattccc aaaagtaagg ttacttgggt 1320
 aagattaaca aaaaataatg tgagaattct gagaaatata atctttaaat attggcaact 1380
 ggagtgaact cttaaaacta actagggttt atatgtttga ctagagcaat gacataataa 1440
 ggtggttaat catcactgga cttgttttca aaaagccaac tactttaaga ggaataaagg 1500
 35 gtggacttgt tgcagttgct gtaggattct aaatccag 1538

40 <210> 4
 <211> 200
 <212> DNA
 <213> Homo sapiens

45 <400> 4
 gatactgcaa tggattgaag gtagaataag ttttatgttt ttgagctaaa ataagtaaat 60
 agggaaacttt aatgtataga aaagcaagtt gttaaaaaga acattatgtt tcaaatata 120
 attttcaatt gaagcatata ttgaaatatt aacataatga ttcatacctt gatttaaacc 180
 agtcttttaa tctgattaag 200

50 <210> 5
 <211> 300
 <212> DNA
 <213> Homo sapiens

55 <400> 5
 tgacggaagc tttgaaattg gtaacattta ttttctattt taataaccaa acttgcaaag 60
 ttaaaaaata tatatgcttt acaccactgg ttatcaactg gggtaaatTT atctctcaca 120
 ggcaatttgg caataactaa aaacatttgt ggttgtcata actgcacagg ggttgggggc 180
 aatggaagtg ctactgggtat ctaaaaggtag aggtcagggg tactgctaaa tattctataa 240
 60 tgcacaaaga atgatgtaac tgaaaatgtt gatagtgagg atgttcagaa accctgattc 300

65 <210> 6
 <211> 300
 <212> DNA
 <213> Homo sapiens

<400> 6

ccacatttct tcattgggata gtaagtgtta aaaaaaaaaa aaacctctgt gccactatca 60
 gtaccttgta aattaggagt agaattttat tattatccct ttaaataaggc agttaccttt 120
 tgagaagata cccactaagt gtgtacagaa atgaaatagt gtctatttgt ctacataatc 180
 attttattta tcgtagcttt catatacttt gaaataacaa aaagactaaa ctgtagagtt 240
 5 tcaaatgaaa taaataggct ttttatgaat ttttagtata acgtatatac tgtacgtctt 300

<210> 7

<211> 300

10 <212> DNA

<213> Homo sapiens

<400> 7

acctgagata gtgggaaaag gtaagaatta atattgacag taaaaagtct tctaaaaatgt 60
 15 atacatttaa ttacatctct aaaaattgtt gtgatattca ttagcaaaat ttaattaaga 120
 atgaatagga aaaacatttg actcttacag acataattat agtggttaata tacacagtgc 180
 gccattaac aacacagggt taaactacgc gttttcactt ctatgcaaat tttgtccatc 240
 tgaactggat gataaacctg ccggtgaagaa tatctgacat tttctatatt tggattgaac 300

20

<210> 8

<211> 200

<212> DNA

<213> Homo sapiens

25

<400> 8

tagcagcata agaattggact aatacaccat attgtcaaag tttgcaaagt gaatataaat 60
 tacttgtagt tgtaaatata aaaaaataa gtagaataat taagagttaa caagtagtta 120
 aatttgtaat agaaatgcta aaattaatgt ttaaaatgaa acactctctt atctacatag 180
 30 gttgttttaa ggaatctggg 200

<210> 9

<211> 200

35 <212> DNA

<213> Homo sapiens

<400> 9

tattggatat gtagatctaa gtaagtacaa ccagaacaag gtaccatgat aacgtctttc 60
 40 taagcacaca tgcgaaaaac attttttcaa ataactgaat tcactctttc aatagtcctt 120
 tgcttaatat aattagaaag ttacaagtag gaaataaatg tattactaat cagaataaat 180
 ataaaatcca gctcctatct 200

45 <210> 10

<211> 203

<212> DNA

<213> Homo sapiens

50 <400> 10

ttaaaaaaaaa ctttgcatt tcgtcatcat caaagcaaat ttcttcatat aaagaaaaat 60
 tctttatcta ctttttcttt tccctctttc tctgctttca ctttacttct tcttctcct 120
 ccccttcttt gtctttttct tctctctctc tctttttgat atatgtctat catatatttc 180
 cagaataaat ccagtacat ctc 203

55

<210> 11

<211> 201

<212> DNA

60 <213> Homo sapiens

<400> 11

catgtcatgc tgattgttaa gtaagtatga cttttaaaaa cattttcata tgcattgagac 60
 tataaacaca cctaattgata tgcattttt tacataatat actgggaatt caaattcata 120
 65 tttcatcaaa ttttaatttt ctgagaattc attttattaa aatttactat gaactctcaa 180
 ggctgtaatt aataattttg c 201

<210> 12
<211> 200
<212> DNA
<213> Homo sapiens

5

<400> 12
tgatttgggt ctttgagatt tctaataatc tttattattg gtagatgca gaacaaaata 60
ataaacgaat cctccaaatt ttggaacttt tatttaataa aaatatatca atgtggaata 120
tcatgcagtt acatttaaaa tatgttcctt aaactgacat cttctcttct cctattacag 180
10 gaggaattct agctccaata 200